



Training Proposal for:
**Farmworker Institute of Education and Leadership
Development**
Clean Energy Workforce Training Program (CEWTP)
Agreement Number: ET10-0601

Panel Meeting of: January 29, 2010

ETP Regional Office: **North Hollywood**

Analyst: N. Weingart

PROJECT PROFILE

Contract
Type: New Hire

Industry
Sector(s): Green Technology
Construction

Counties
Served: Monterey, Kern

Union(s): ☐ Yes ☒ No

FUNDING DETAIL

All funding will be under the American Recovery and Reinvestment Act (ARRA).

Program Costs	Support Costs	Total ETP Funding	In-Kind Contribution
\$624,000	\$39,840	\$663,840	N/A

TRAINING PLAN TABLE

Job No.	Job Description (by Contract Type)	Type of Training	Estimated No. of Trainees	Range of Hours		Average Cost per Trainee	Post-Retention Wage
				Class / Lab	CBT		
1	New Hire	Commercial Skills Computer Skills	120	260	0	\$5,532	\$13.00
				Weighted Avg: 260			

ETP Minimum Wage by County (Benchmark Wage): The ETP minimum wage for Kern and Monterey counties is \$11.16 per hour.

Health Benefits: ☒ Yes ☐ No This is employer share of cost for healthcare premiums – medical, dental, vision.

Used to meet the Post-Retention Wage?: ☐ Yes ☐ No ☒ Maybe

Participating employers may use health benefits to meet the post-retention wage.

Wage Range by Occupation	
Occupation Title	Wage Range
Solar Panel Installer	

INTRODUCTION

In this proposal, Farmworker Institute of Education and Leadership Development (FIELD) seeks funding for retraining as outlined below:

FIELD is a statewide 501(c)3 nonprofit organization based in the San Joaquin Valley. It was founded by Cesar E. Chavez and the United Farm Workers in 1978 and became independent in 2008. It is currently governed by a seven member board of directors and operates three main business units: Industrial Services, Community Services, and Educational Services. FIELD operates with a staff of 25; the corporate office in Bakersfield, provides administrative support to the organization's programs including finance, human resources, information technology, legal, audits, property management, and program development. Local Field offices are in Wasco, Greenfield, Monterey County, and Modesto.

FIELD's goal is to promote economic and social prosperity for Latinos and other low-income individuals and their families by:

- Providing value-added services to regional economic sector endeavors;
- Creating high quality programs and making them accessible to individuals;
- Strengthening organizations and institutions through collaborative initiatives; and
- Promoting leadership development in the communities it serves.

To date, FIELD, in partnership with State and local entities, has provided workforce development programs in agricultural communities since 2002 and has served over 25,000 low-income, low skilled workers by providing literacy skills, English and Vocational English as a Second Language (ESL and VESL), and adult charter high school diplomas.

State EDD unemployment provided data reports showing that the agricultural communities of Wasco, Shafter, Arvin, and McFarland in Kern County have unemployment rates ranging from 27% to 38%; and that the Monterey County communities of Greenfield, Soledad, and Gonzalez have unemployment rates that average 20%.

Based on identified community and industry needs, FIELD recently initiated a 400-hour, college-level, industrial technology class in solar energy efficiency; 56 students are due to graduate in April. FIELD purposes to provide training in rural residential solar panel installation as funded under CEWTP.

PROJECT DETAILS

FIELD intends to train and place 120 unemployed and dislocated workers as residential solar panel installers in Kern and Monterey counties. The 260-hour Curriculum consists of Commercial Skills (Reading Technical Drawings, Technical Math for Trades, Electrical Circuit Analysis, Solar Photovoltaic Systems, and Safety) and Computer Skills (Word and Excel) to read work orders, conduct site audits, and write reports. Training is designed to provide all of the skills that trainees need to successfully enter the job market.

This Curriculum is a modification of FIELD's current industry-certified, industrial technology class in solar renewable energy developed by the Kern Community College District. The ETP program will focus on residential, energy-efficient retrofits with solar panel installation. Classes will be held four hours per day, five days a week, over 13 weeks. Training will be delivered by both in-house staff and outside vendors and will be held at leased facilities in Greenfield, Wasco, and Arvin. In addition to formal classroom/laboratory hours, FIELD staff will assist trainees with resume writing, job search/interviewing skills, and placement.

Under the Panel's guidelines for CEWTP, the 70% Portfolio Model will be made available for new-hire trainees. A Certificate of Completion or Competency will be required as a condition of using the 70% Portfolio Model. The retention period may be 200 hours within 365 days, consistent with the Panel's guidelines.

FIELD is in the process of founding a new, wholly-owned, for-profit subsidiary that will hire at least 60 workers as residential solar panel installers in newly-created positions around the state. FIELD also intends to place another 60 graduates with subcontractors to energy system developers around the State such as GoGreen.

At the end of training, students will receive a Certification of Recognition of entry-level training from the North American Board of Certified Energy Practitioners (NABCEP). FIELD staff believes that after training, students will have sufficient knowledge to take the NABCEP test and will also be prepared to sit for the IBEW (electrical workers) exam, should they wish to enter a union pre-apprenticeship program.

Employer Marketing

FIELD staff indicated that it has ongoing relationships with the communities it serves, sufficient to identify local companies interested in hiring graduates. FIELD is currently in the process of

establishing an Employer Advisory Board to provide input regarding current and future community and employer needs and to help facilitate new hire placement.

This CEWTP-funded training program will be a collaborative effort among FIELD, the participating communities, and EDD. Moreover, FIELD has pledged an in-kind contribution of approximately \$100,000: training curriculum (\$50,000); and leased facilities in Arvin, Wasco, and Greenfield (\$50,000). In addition, FIELD has applied for RFP funds of \$250,000 from EDD's "Industries with a Statewide Need" program to cover on-the-job training wages.

Moreover, if the proposed ETP contract is awarded to FIELD, the Cities of Greenfield, Wasco, Shafter, and Arvin have agreed to consider contributing \$50,000 each towards local business development centers for energy efficiency entrepreneurship training in solar panel installation. This would help sustain the training program by nurturing new installation businesses and provide an ongoing source of employment in clean energy.

New Hire Recruitment Plan

Trainees will be unemployed workers from rural areas of high unemployment in Kern and Monterey counties. According to the Field representatives, staff will recruit a significant number of trainees directly from its large, ongoing English classes. In addition, staff does direct and media outreach to local businesses, public schools, community colleges, young adult charter schools, churches, and city councils. FIELD also has close ties to One-Stop Centers and Workforce Investment Boards that will refer potential candidates.

High Unemployment Area

The 120 trainees in Job Number 1 will work in High Unemployment Areas (HUA). However, FIELD is not requesting a wage or retention modification on this basis.

Retention

Under CEWTP, the Panel may modify the retention period for trainees in the building trades from 90 consecutive days to 200 hours within 365 days. FIELD is requesting this retention period and is also asking for the 70% portfolio retention.

All participating employers will be screened for compliance with the Panel's guidelines for eligibility under CEWTP, prior to trainee enrollment.

RECOMMENDATION

For the reasons set forth above, staff recommends approval of this proposal.

DEVELOPMENT SERVICES

N/A

ADMINISTRATIVE SERVICES

N/A

TRAINING VENDORS

The Kern Community College District and Mr. Art Williams of Los Angeles have been retained to provide a portion of the training for fees to be determined. Other trainers will be identified for ETP recordkeeping purposes as they are retained by FIELD.

Exhibit B: Menu Curriculum**Class/Lab Hours**

260 hours

COMMERCIAL SKILLS**Reading Technical Drawings**

- Basis for Blueprint Reading
- Lines
- Views
- Dimensions and Notes
- Section
- Computer Numerical Control (CNC) Fundamentals
- Geometric Dimensioning and Tolerance
- Computer Graphics Technology
- Welding Drawings
- Working Drawings
- Sketching Lines and Basic Forms
- Freehand Lettering
- Shop Sketching: Pictorial Drawings

Solar Photovoltaic Systems

- Introduction to Photovoltaic Systems
- Solar Radiation
- Site Surveys and Preplanning
- System Components and Configurations
- Cells, Modules, and Arrays
- Batteries
- Charge Controllers
- Inverters
- System Sizing
- Mechanical Integration
- Electrical Integration
- Utility Interconnection
- Permitting and Inspection

Electrical Circuit Analysis

- Foundational AC Concepts
- Impedance Networks
 - AC Series-Parallel Circuits
 - Methods of AC Analysis
 - AC Network Theorems
 - Resonance
 - Filters and the Bode Plot
 - Three-Phase System
 - Transformers and Coupled Circuits
 - Non-sinusoidal Waveforms

Technical Math for Trades

- Measurement
- Fundamentals of Algebra
- Fundamentals of Plane Geometry
- Geometric Figures: Areas and Volumes
- Basic Statistics
- Fundamentals of Trigonometry

Occupational Safety and Health*

- Introduction to OSHA, OSH Act, Inspections, Citations, and Penalties
- Walking and Working Surfaces
- Means of Egress and Fire Protection
- Electrical
- Flammable and Combustible Liquids
- Personal Protective Equipment
- Machine Guarding
- Hazard Communication
- Introduction to Industrial Hygiene/Bloodborne Pathogens
- Safety & Health Programs

*Safety training cannot exceed 10% of a trainee's total hours

COMPUTER SKILLS**Word**

- Working with Text
- Working with Paragraphs
- Working with Documents
- Managing Files
- Using Tables
- Working with Pictures and Charts

Excel

- Working with Cells
- Working with Files
- Formatting Worksheets
- Setting Up Pages and Printing
- Working with Worksheets and Workbooks
- Working with Formulas and Functions
- Using Charts and Objects

Note: Reimbursement for new hire training is capped at 260 total training hours per trainee, regardless of delivery method.